

Main idea

Atoms gain stability when they share electrons and form covalent bonds.

Covalent bond

A chemical bond that results from sharing valence electrons.

Molecule

Formed when two or more atoms bond covalently

Single covalent bond

Lewis structure



[http://www.google.com/search?um=1&hl=en&client=safari&tbo=d&biw=1024&bih=672&tbm=isch&sa=1&q=lewis+structure&oq=lewis+structure&gs\\_l=i...](http://www.google.com/search?um=1&hl=en&client=safari&tbo=d&biw=1024&bih=672&tbm=isch&sa=1&q=lewis+structure&oq=lewis+structure&gs_l=i...)

Exothermic reaction



[http://www.google.com/search?um=1&hl=en&client=safari&tbo=d&biw=1024&bih=672&tbm=isch&sa=1&q=fire&oq=fire&gs\\_l=img.3...26740.27223.0.27684.4.4.0...](http://www.google.com/search?um=1&hl=en&client=safari&tbo=d&biw=1024&bih=672&tbm=isch&sa=1&q=fire&oq=fire&gs_l=img.3...26740.27223.0.27684.4.4.0...)

Exothermic reaction

A chemical reaction or process in which more energy is released than is required to break bonds in the initial reactants.

Endothermic reaction

Endothermic reaction

A chemical reaction or process in which a greater amount of energy is required to break the existing bonds in the reactants than is released when the new bonds are formed.

Bonds and energy

Triple covalent bond

Triple covalent bond

Forms when three pairs of electrons are shared between two atoms.

Double covalent bond

Pi bond

Pi bond

A bond that is formed when parallel orbitals overlap to share electrons.

Sigma bond

Sigma bond

A single covalent bond that is formed when an electron pair is shared by the direct overlap of bonding orbitals.